**Assignment 1:** Agile Project Planning - Create a one-page project plan for a new software feature using Agile planning techniques. Include backlog items with estimated story points and a prioritized list of user stories.

# Agile project planning:

For a E-comm application with a new feature “Shopping cart” is going to be developed. Here’s a Project plan with Scrum framework on agile methodology.

**Agile Project Plan for New Software Feature: Shopping Cart**

**Objective:** develop a web page where users can add, update, and remove items in their shopping cart, view the total cost, and proceed to checkout page.

**Project Backlog:**

|  |  |  |  |
| --- | --- | --- | --- |
| ID | User Story | Sprint points | Priority |
| SC-001 | **add product to shopping cart** | **3** | **High** |
| SC-002 | **Remove & Update Product from cart** | **5** | **High** |
| SC-003 | **Total cost of products added** | **2** | **Medium** |
| SC-004 | **Product can be saved for later use** | **3** | **Medium** |
| SC-005 | **Proceed to checkout page with total amount to pay** | **13** | **Low** |
| SC-006 | **Save items for future use to not include in main cart and amount** | **8** | **Low** |
| SC-007 | **Make coupon available and provide relative discount** | **8** | **Medium** |

**Sprint Planning and sprint backlog:**

* **Developers:** 2
* **QA:** 1
* **Sprint length:** 10 days
* **Total sprint points:** 42
* **Velocity:** 13-16 per sprint
* **Start Date: 21 January, 2024**
* **Sprint 1 (21st Jan – 1st Feb):**
  + High priority task and core task to develop first   
     SC-001, SC-002, SC-003, SC-004 will develop and tested.
  + 13 points will be covered.
  + Release x.1v
* **Sprint 2(3nd Feb – 13th Feb):**
  + Task which can deliver early and have medium priority can be developed   
     SC-006, SC-007 will develop and tested.
  + 16 points will be covered.
  + Release x.2v
* **Sprint 3(14nd Feb – 26th Feb):**
  + Low priority task   
     SC-005 will develop and tested.
  + 13 points will be covered.
  + Release x.3v

**Definition of Done (DoD):**

* + **User Stories will be implemented and tested with unit, integration, UAT.**
  + **Feature should work on any device, browser etc.**
  + **Bugs and feedbacks must be resolved before deadline.**

**Risk and mitigation:**

* + **Risk:** Delayed feedback **Mitigation:** Provide schedule and demos before.
  + **Risk:** Technical challenges in integrating discount codes.  
    **Mitigation:** Allocate additional buffer time in Sprint 2.